

CONVERSION TABLE *Millimeters or inches is wavelength dependent. Assumes reference $\lambda = 632.8 \text{ nm}$

Number of Bands	Microinches (Millionths of an inch)	Inches	Millimeters
0.1	1.2	0.000012	0.000032
0.2	2.5	0.000025	0.000063
0.3	3.7	0.000037	0.000095
0.4	5	0.000050	0.000127
0.5	6.2	0.000062	0.000158
0.6	7.5	0.000075	0.000190
0.7	8.7	0.000087	0.000221
0.8	10	0.000100	0.000253
0.9	11.2	0.000112	0.000285
1.0	12.5	0.000125	0.000316
2.0	24.9	0.000249	0.000633
3.0	37.4	0.000374	0.000949
4.0	49.8	0.000498	0.001266
5.0	62.3	0.000623	0.001582
6.0	74.7	0.000747	0.001898
7.0	87.2	0.000872	0.002215
8.0	99.7	0.000997	0.002531
9.0	112.1	0.001121	0.002848
10.0	124.6	0.001246	0.003164
11.0	137	0.001370	0.003480
12.0	149.5	0.001495	0.003797
13.0	161.9	0.001619	0.004113
14.0	174.4	0.001744	0.004430
15.0	186.9	0.001869	0.004746
16.0	199.3	0.001993	0.005062
17.0	211.8	0.002118	0.005379
18.0	224.2	0.002242	0.005695
19.0	236.7	0.002367	0.006012
20.0	249.1	0.002491	0.006328

Concave surface: finger pressure at edges



Concave surface: finger pressure at center



One microinch = one millionth of an inch = .000001 in.

The term "microinch" is a convenient way of saying "one millionth of an inch." A popular term used with surface finish measurement, microinch specifies an average value for surface finish. Here, microinch and millionth of an inch are used interchangeably. For many purposes, it is sufficient to take 1 band--10 microinches or 0.0003mm. To make a true test, both parts being tested, the work and optical flat, must be allowed to acclimate to the surrounding temperatures at the time of the test. Testing two flats at different temperatures will result in an untrue reading.